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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,138	03/29/2001	Kiran Challapali	US 010121	5629
24737	7590	01/18/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			WOZNIAK, JAMES S	
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			2655	

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/821,138	<b>Applicant(s)</b> CHALLAPALI, KIRAN	
	<b>Examiner</b> James S. Wozniak	<b>Art Unit</b> 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the office action from 8/3/2005, the applicant has submitted an amendment, filed 11/3/2005, arguing to traverse the art rejection based on the limitation regarding the use of emoticon strings to create displayable animated face images that can reproduce facial movements (*Amendment, Page 7*). Applicant's arguments have been fully considered, however the previous rejection is maintained due to the reasons listed below in the response to arguments.

### ***Response to Arguments***

2. Applicant's arguments have been fully considered but they are not persuasive for the following reasons:

With respect to the independent claims the applicant argues that Sutton et al (*U.S. Patent: 6,539,354*) fails to teach using emoticons to implement facial expressions (*Amendment, Page 6*). In response, the examiner notes that such a feature is taught by the Rothkrantz et al ("*A Text Based Talking Face*") reference. Rothkrantz teaches a tool that utilizes dependencies between text and facial expressions to generate 3D facial animations or movements (*Abstract*). As can be seen in Fig. 2, a facial expression generator utilizes a dictionary of facial expressions and a knowledge element to process input text for the generation facial movements or animations.

Included in the input text the system is capable of processing in order to generate facial animations are emoticons. As noted by Rothkrantz in reference to emoticon strings (*smileys*), “we use these symbols to generate appropriate 3D *animated faces* as background or next to the text” (*Section 5*). Thus, Rothkrantz, not Sinclair, provides the teaching for generating facial movements (*animations*) corresponding to input emoticon text strings as is required by the claimed invention.

In response to the applicant’s arguments that Rothkrantz fails to disclose or suggest using emoticon strings to create displayable animated face images that can reproduce facial movements (*Amendment, page 7*), the examiner notes that Rothkrantz teaches emoticons (*smileys*) that comprise strings of several text (*keyboard*) characters that are used to “generate appropriate 3D *animated faces*” as is noted in *Section 5*. Rothkrantz further discloses that the animated (*moving*) 3D face images are indicative of facial expressions (*Section 2*). Thus, Rothkrantz teaches using emoticon strings (*smileys*) to create displayable animated face images (*animated 3D faces*) that can reproduce facial movements (*animated 3D face having expressions*) as is required by the claimed invention.

In response to the applicant’s arguments that there is no suggestion or disclosure within Rothkrantz for the animated faces to produce facial movements, the examiner notes that the facial animation itself is interpreted as the facial movement, since animation is the creation of motion that results from displaying a series of frames in sequence. Also, as noted above, Rothkrantz utilizes text including emoticons to generate appropriate animations indicative of facial expressions.

The dependent claims further limit rejected independent claims, and thus, also remain rejected.

Thus, for at least the reasons given above, Claims 1-20 remain rejected.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutton et al (U.S. Patent: 6,539,354) in view of Rothkrantz et al ("*A Text Based Talking Face*," 2000).

With respect to **Claims 1 and 9**, Sutton discloses a visual system or program product stored on a recordable medium (computer with storage), which when executed provides a visual speech system comprising (*Fig. 1, Title*): A text-to-animation system for generating a displayable animated face image that can reproduce facial movements corresponding to the received word strings and the received emoticon strings (*Col. 20, Lines 47-52; Figs. 2 and 10*).

Sutton does not explicitly disclose a data import system for receiving text data that includes emoticon strings, wherein facial animation is based on emoticon strings. Sutton's application includes an audio and text based input where users can also select the desired emotion parameter of the display character (*Col. 20, Lines 12-31*), but Sutton fails to explicitly define the claimed emoticon parameter for controlling the animation. However, Rothkrantz

teaches an animated 3D face that utilizes input text to generate facial movements, wherein the text input includes emoticons (*Pages 330-331, Section 5; Page 328, Fig. 1*).

Sutton and Rothkrantz are analogous art because they are from a similar field of endeavor in text-based facial animation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sutton with the use of emoticons for animation generation as taught by Rothkrantz to provide a means for non-verbal text understanding to implement a more effective human computer interface character (*Rothkrantz, Page 327, Section 1*).

With respect to **Claim 2**, Sutton teaches a visual system/program further comprising a keyboard for typing in text data (*Col. 20, Lines 56-57*).

With respect to **Claim 3**, Sutton discloses a visual system/program further comprising a text-to-audio system that can generate an audio speech broadcast corresponding the received text strings (*Col. 20, Lines 47 - 52*).

With respect to **Claim 4**, Sutton et al. disclose an audio-visual interface for displaying the displayable animated face image along with the audio speech broadcast (*Col. 20, Lines 47 - 56*).

With respect to **Claims 5 and 10**, Rothkrantz teaches the generation of facial animations based on emoticons (*Pages 330-331, Section 5*) and a table associating emoticon strings with particular emotions (*Table 1*).

With respect to **Claims 6 and 11**, Sutton discloses the system or program wherein the text- to-animation system associates each word string with a spoken word and wherein the spoken word is reproduced on the animated face image with at least one mouth movement (talking) (*Col 20, Lines 12-31*).

With respect to **Claims 7 and 12**, Sutton describes a feature that displays a particular emotion while an animated face is talking (*Col. 20, Lines 12-31*) and an algorithm for morphing facial movements with the movement of the mouth (lip-syncing) (*Col. 20, Lines 32 - 41, Fig. 10*).

With respect to **Claim 8**, Sutton discloses facial animation system and program usage in an on-line chat environment (*Col. 20, Lines 12-67*), which would inherently require an input/output system for receiving and sending text.

With respect to **Claim 13**, Sutton discloses a visual system or program product stored on a recordable medium (computer with storage), which when executed provides a visual speech system comprising (*Fig. 1, Title*): A text-to-animation system for generating a displayable animated face image that can reproduce facial movements corresponding to the received word strings and the received emoticon strings (*Col. 20, Lines 47-52; Figs. 2 and 10*). Sutton further discloses facial animation system and program usage with an on-line chat application such as AOL instant messenger or Microsoft messenger (*Col. 20, Lines 12-67*), which would inherently require two or more client systems for sending and receiving text.

Sutton does not explicitly disclose a data import system for receiving text data that includes emoticon strings, wherein facial animation is based on emoticon strings. Sutton's application includes an audio and text based input where users can also select the desired emotion parameter of the display character (*Col. 20, Lines 12-31*), but Sutton fails to explicitly define the claimed emoticon parameter for controlling the animation. However, Rothkrantz teaches an animated 3D face that utilizes input text to generate facial movements, wherein the text input includes emoticons (*Pages 330-331, Section 5; Page 328, Fig. 1*).

Sutton and Rothkrantz are analogous art because they are from a similar field of endeavor in text-based facial animation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sutton with the use of emoticons for animation generation as taught by Rothkrantz to provide a means for non-verbal text understanding to implement a more effective human computer interface character (*Rothkrantz, Page 327, Section 1*).

**Claim 14** contains subject matter similar to Claims 5 and 10, and thus, is rejected for the same reasons.

**Claim 15** contains subject matter similar to Claims 6 and 11, and thus, is rejected for the same reasons.

**Claim 16** contains subject matter similar to Claims 7 and 12, and thus, is rejected for the same reasons.

With respect to **Claim 17**, Sutton teaches a method for entering text data, including a word string, using a keyboard, converting word strings to audio speech; converting the word strings to mouth movements on the displayable animated face image, such that the mouth movements correspond with the audio speech; converting emotion parameters to facial movements on the displayable animated face image, such that the facial movements correspond with expressed emotions (*emotion parameter*); and displaying the animated face image along with a broadcast of the audio speech (*Col. 20, Lines 12 - 67, Fig. 10*).

Sutton does not explicitly disclose a data import system for receiving text data that includes emoticon strings, wherein facial emotion animation is based on emoticon strings. Sutton's application includes an audio and text based input where users can also select the



desired emotion parameter of the display character (Col. 20, Lines 12-31), but Sutton fails to explicitly define the claimed emoticon parameter for controlling the animation. However, Rothkrantz teaches an animated 3D face that utilizes input text to generate facial movements, wherein the text input includes emoticons (*Pages 330-331, Section 5; Page 328, Fig. 1*).

Sutton and Rothkrantz are analogous art because they are from a similar field of endeavor in text-based facial animation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sutton with the use of emoticons for animation generation as taught by Rothkrantz to provide a means for non-verbal text understanding to implement a more effective human computer interface character (*Rothkrantz, Page 327, Section 1*).

**Claim 18** contains subject matter similar to Claims 7 and 12, and thus, is rejected for the same reasons.

With respect to **Claim 19**, Sutton further discloses a server for providing facial animations and audio speech (*Col. 15, Lines 34-45*).

With respect to **Claim 20**, Sutton discloses a visual system or program product stored on a recordable medium (computer with storage), which when executed provides a visual speech system comprising (*Fig. 1, Title*): A text-to-animation system for generating a displayable animated face image that can reproduce facial movements corresponding to the received word strings and the received emoticon strings (*Col. 20, Lines 47-52; Figs. 2 and 10*).

Sutton does not explicitly disclose a data import system for receiving text data that includes emoticon strings, wherein facial animation is based on emoticon strings. Sutton's application includes an audio and text based input where users can also select the desired

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emotion parameter of the display character (Col. 20, Lines 12-31), but Sutton fails to explicitly define the claimed emoticon parameter for controlling the animation. However, Rothkrantz teaches an animated 3D face that utilizes input text to generate facial movements, wherein the text input includes emoticons (*Pages 330-331, Section 5; Page 328, Figs. 1-3*). Rothkrantz also discloses a table associating emoticon strings with particular emotions (*Table 1*).

Sutton and Rothkrantz are analogous art because they are from a similar field of endeavor in text-based facial animation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sutton with the use of emoticons for animation generation as taught by Rothkrantz to provide a means for non-verbal text understanding to implement a more effective human computer interface character (*Rothkrantz, Page 327, Section 1*).

### *Conclusion*

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


Liles et al (*U.S. Patent: 5,880,731*)- teaches a system that utilizes emoticons in generating avatar animations.

Skelly (*U.S. Patent: 6,064,383*)- teaches a system that uses text including emoticons to generate character expressions.

Ostermann et al (*U.S. Patent: 6,963,839*)- teaches an animation server that generates animated character movements using words and emoticons.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
SUSAN MCFADDEN  
PRIMARY EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak  
12/12/2005

  
SUSAN MCFADDEN  
PRIMARY EXAMINER